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**SYSTEM AND METHOD FOR VERIFYING PROGRAM FOR IC CARD AT EXECUTION AND**

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**Application No.:** 11-208383 [JP 99208383]

**Filed:** July 23, 1999 (19990723)

**International Class:** G06K-017/00; G06F-011/28

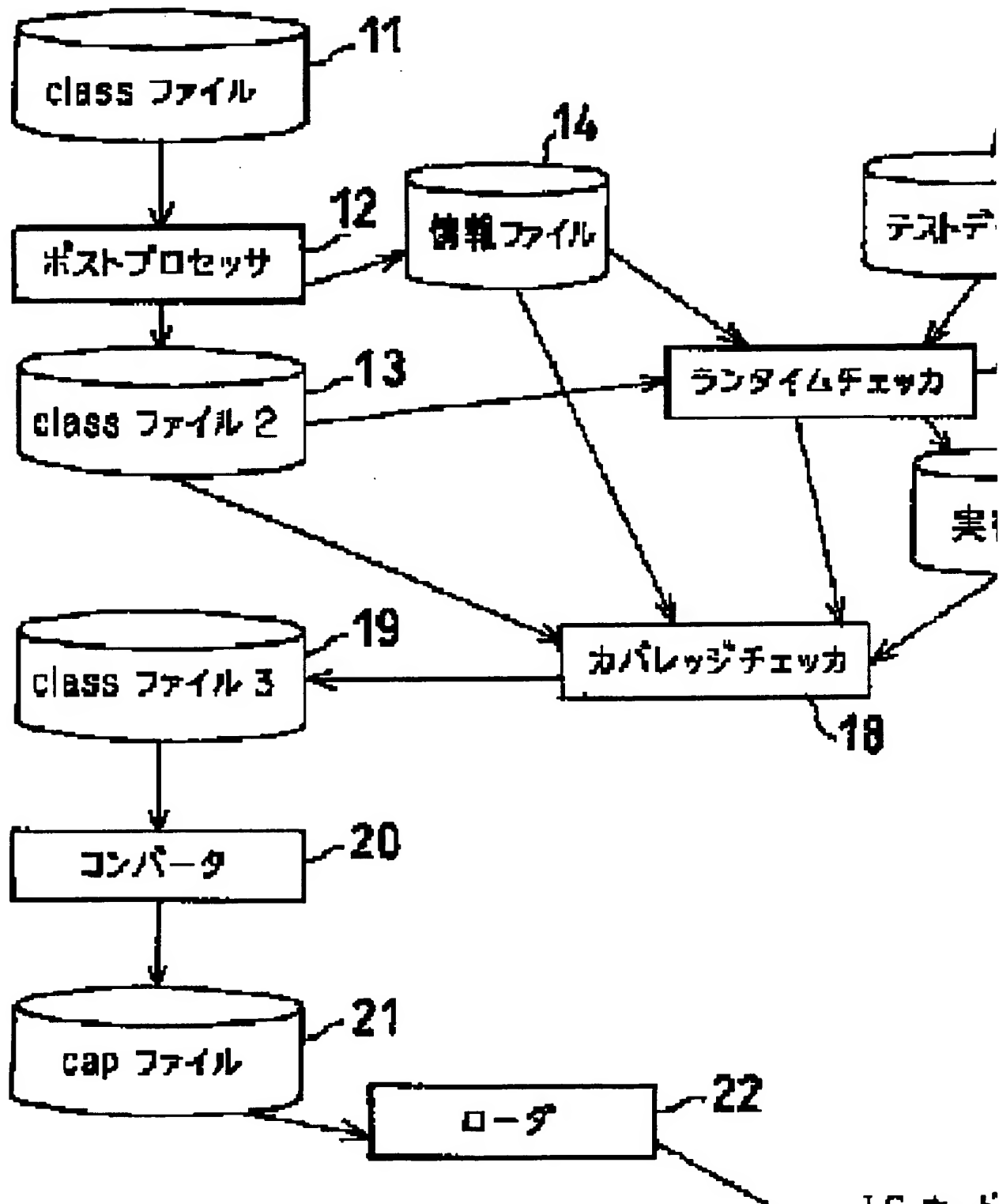
**ABSTRACT**

**PROBLEM TO BE SOLVED:** To remove the partial function of verification at execution from installed an IC card whose memory resources, etc., are insufficient by sufficiently verifying an application program legitimate tool chain outside the IC card about the verification of the application program for the IC card execution.

**SOLUTION:** A run time checker 16 and a coverage checker 18 performing the verification of an application execution are provided, a class file 2 (13) is inputted, and the checker 16 performs verification at execution with appropriate test data 15. Whether a Class file has undergone a reasonable routine is decided by checking signature added when the Class file is generated, and a Cap file 21 is generated from a Class file 3 (19) at verification at execution. A loader 22 loads the Cap file 21 into an IC card.

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WPI Acc No: 2001-619295/200172

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**Program execution verification system for IC card, generates  
final by adding specific information to secondary file and converts into  
loading file**

Patent Assignee: TOSHIBA KK (TOKE )

Number of Countries: 001    Number of Patents: 001

Patent Family:

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Priority Applications (No Type Date): JP 99208383 A 19990723

Patent Details:

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JP 2001034715	A		6 G06K-017/00	

Abstract (Basic): JP 2001034715 A

NOVELTY - The secondary group file (13) is executed based on the information file and test data. The program execution routines for each IC card is judged, based on which the specific information is added to the secondary file using log data. A final file (19) is produced, based on the new information, which is converted into specific file. The converted file is loaded into the card.

DETAILED DESCRIPTION - An analyzer generates two sets of files (11,13) comprising various programs of IC card, using the source file and information file. An execution unit executes each file based on the stored information and source files. The files are converted relevant to the routines judgment and are loaded into each card. INDEPENDENT CLAIMS are also included for the following:

- (a) Program execution verification procedure;
- (b) IC card

USE - For execution verification of application programs for IC card.

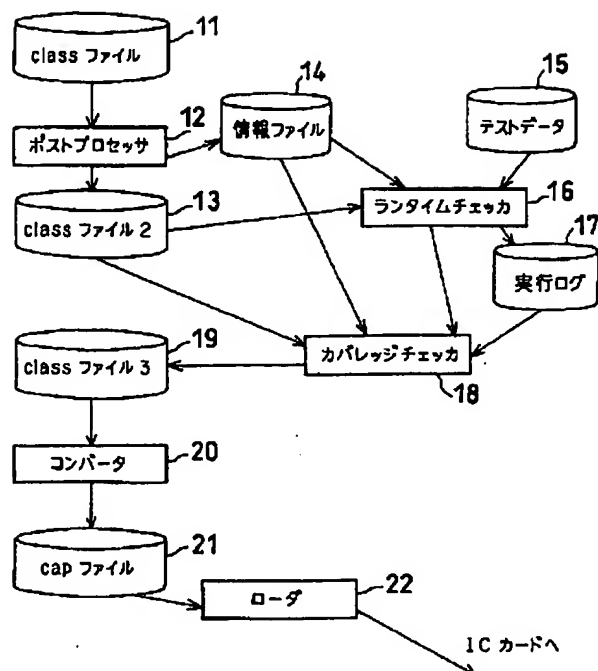
ADVANTAGE - Prevents error during execution, by verifying the program validation reliably. Eliminates need for the inspection routine after loading program in the IC card, by verifying program before loading.

DESCRIPTION OF DRAWING(S) - The figure shows the program execution verification system.

Files (13,19)

pp; 6 DwgNo 1/3

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Title Terms: PROGRAM; EXECUTE; VERIFICATION; SYSTEM; IC; CARD; GENERATE;  
FINAL; ADD; SPECIFIC; INFORMATION; SECONDARY; FILE; CONVERT; LOAD; FILE  
Derwent Class: T01; T04  
International Patent Class (Main): G06K-017/00  
International Patent Class (Additional): G06F-011/28  
File Segment: EPI  
Manual Codes (EPI/S-X): T01-F01B; T01-F06; T01-G02A2D; T01-J20; T04-K02

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